

1. A color measurement device comprising
 - a means for electronically recording a digital color image,
 - a target holder extending from the recording means having a distal end, and
 - a target at the distal end of the holder, the target having one or more reference color regions thereon.
2. The device of claim 1 wherein the recording means is a digital camera.
3. The device of claim 2 wherein there are a plurality of reference color regions on the target.
4. The device of claim 3 wherein the target is a ring and the reference color regions are circumferentially spaced on the ring.
5. The device of claim 4 wherein the device further includes a controller.
6. The device of claim 5 wherein the controller is programmed with reference color values corresponding to the reference color regions.
7. The device of claim 6 wherein the camera records color values corresponding to the reference color regions and a target area and the controller is programmed to calculate a transformation based upon the reference color values and the recorded color values corresponding to the reference color regions.
8. The device of claim 7 wherein the controller is programmed to calculate a color value for the target area based on the transformation and the recorded color value for the target area.
9. The device of claim 8 wherein the plurality of reference color regions is at least 3.
10. The device of claim 9 wherein the plurality of reference color regions is at least 6.
11. The device of claim 1 wherein the device additionally includes an illumination source.

12. A process for determining the color of a target area which comprises:
providing a device comprising a means for electronically recording an image having a target areas extending therefrom having one or more reference color,
juxtaposing the target with a target area,
recording an image of the target including the reference color(s) and the target area,
calculating a transform based on color values recorded for the reference colors and predetermined color values for the reference colors,
applying the transform to the recorded color value for the target area to calculate a corrected value for the target area.
13. The method of claim 12 wherein the transformation is calculated using a matrix linear regression
14. The method of claim 13 wherein the target includes at least 3 reference colors.
15. The method of claim 14 wherein the recorded color values used in calculating the transform are average values.
16. The method of claim 15 wherein the method additionally includes assigning pixel coordinates to the reference color areas whereas the recorded color values are associated with the predetermined color values.
17. The method of claim 14 wherein the target area is facial skin.
18. The method of claim 14 wherein the target area is hair.